

An Analysis of the Philippine Institute of Civil Engineers' Inaction Following National Infrastructure Failures

Executive Summary

The catastrophic collapses of the Cabagan-Sta. Maria Bridge and the Ungka Flyover have exposed a profound crisis of accountability within the Philippine civil engineering sector. This report investigates the role of the Philippine Institute of Civil Engineers (PICE), the country's sole professional organization for civil engineers, in the aftermath of these disasters. The analysis reveals that PICE's institutional inaction in launching an independent technical investigation into these failures is a direct consequence of a deep and long-standing nexus between its leadership and the Department of Public Works and Highways (DPWH). This interlocking relationship constitutes a significant conflict of interest and represents a fundamental failure to uphold PICE's own Code of Ethics, particularly the paramount duty to protect public safety. The evidence, including a history of DPWH officials holding top PICE leadership positions, leads to the conclusion that PICE, in its present form, functions as a de facto pseudo-governmental organization, prioritizing the interests of its influential members within the DPWH over its core mission of integrity, social responsibility, and independent professional oversight.

1. Introduction: Context of Infrastructure Failures and the Crisis of Accountability

The Philippines has recently been marked by two high-profile infrastructure failures that have shaken public confidence and ignited national debate about accountability and engineering integrity. These incidents are not isolated events but rather symptoms of a systemic issue that warrants a deep and critical examination of the institutions tasked with safeguarding public works.

1.1 The Ungka Flyover and Cabagan-Sta. Maria Bridge Disasters

The Ungka Flyover, a project in Iloilo costing ₱680 million, was hailed as a solution to traffic congestion. However, its premature closure just 12 days after its inauguration due to "vertical displacements" sparked widespread frustration and calls for an investigation.¹ Rectification efforts, which included soil stabilization methods like jet

grouting, were projected to cost an additional ₱250 million and take at least 10 months to complete, representing a substantial waste of public funds.¹ Separately, the Cabagan-Sta. Maria Bridge in Isabela, a ₱1.2-billion structure, suffered a far more dramatic and dangerous fate. It collapsed a mere 26 days after its opening, an incident that President Ferdinand Marcos Jr. directly attributed to an inherent "design flaw" and a critical lack of load capacity.⁵

1.2 The Call for Accountability

These disasters did not go unnoticed by the country's political leaders. The Senate and House of Representatives initiated their own investigations, with legislators expressing outrage at the recurring tragedies and the squandering of public funds.³ During a privileged speech, Senate President Pro Tempore Jinggoy Estrada publicly named several high-ranking Department of Public Works and Highways (DPWH) officials allegedly responsible for the Cabagan-Sta. Maria Bridge's failure, including Undersecretaries Eugenio Pipo Jr. and Ador Canlas.⁵ This action elevated the issue from a technical problem to a matter of potential high-level corruption and mismanagement, as Estrada suggested these were the same officials President Marcos Jr. had referred to when he spoke of corruption in government infrastructure projects.⁵

1.3 PICE's Role and the Core Inquiry

The Philippine Institute of Civil Engineers (PICE) is officially recognized by the Professional Regulation Commission as the sole accredited professional organization for civil engineers in the country.¹⁰ Given its standing, PICE's role in providing independent, expert oversight is crucial to ensuring public safety and upholding professional standards. The central question arising from these events is why PICE failed to launch its own independent technical investigation into these catastrophic failures. This institutional silence, especially when its own members were implicated, compels an inquiry into whether this inaction constitutes a conflict of interest and a direct failure to uphold its professional mission and Code of Ethics, and if it supports the conclusion that PICE is a de facto pseudo-governmental organization managed by the DPWH.

2. PICE's Foundational Principles: A Standard for Measurement

To assess PICE's response, it is necessary to first establish the organization's own stated standards and ethical commitments. These principles serve as the benchmark against which its actions—or lack thereof—can be measured.

2.1 Mission, Vision, and Core Values

PICE's mission is "To advance the welfare of our members and the development and prestige of the civil engineering profession and to be a dynamic force in nation building".¹¹ Its vision positions the organization as "The leader among professional organizations known globally for professionalism, integrity, excellence and social responsibility. – A key player in nation building".¹¹ The organization also explicitly outlines a set of core values: Professionalism, Integrity, Leadership, Excellence, and Social Responsibility.¹¹ These statements articulate a dual mandate: to serve its members and to serve the public by contributing positively to national development.

2.2 The PICE Code of Ethics: The Paramount Duty

The PICE Code of Ethics provides the most detailed framework for its members' professional conduct. Its Fundamental Principles require civil engineers to uphold the "integrity, honor and dignity of the civil engineering profession" by "using their knowledge and skill for the enhancement of human welfare" and "being honest and impartial and serving with fidelity the public".¹² The Code's Fundamental Canons further specify these duties. The most critical is Canon 1, which unequivocally states that "Civil Engineers shall hold paramount the safety, health and welfare of the public...".¹² Another crucial canon is Canon 4, which prohibits conflicts of interest, asserting that "Civil Engineers shall act in professional matters for each employer or client as faithful agents or trustees, and shall avoid conflicts of interest".¹²

2.3 The Paradox of "Nation Building"

The organization's mission to be a "dynamic force in nation building" is a noble goal, but it is also the very source of a fundamental institutional conflict. The term "nation building" in the Philippines is heavily associated with the government's infrastructure programs, which are primarily managed by the DPWH. Given that a significant number of PICE's members and leaders are employed by the DPWH, PICE's "nation building" mission can be interpreted as an endorsement of, or even a form of loyalty to, the DPWH's agenda. This creates a deeply embedded contradiction. When a PICE member who is a high-ranking DPWH official is implicated in a project failure, the organization is placed in a no-win situation. It must choose between its duty to its member and its ethical duty to the public. The mission that should compel PICE to act as an independent oversight body is the same one that compromises its ability to do so, potentially being used to justify inaction for the sake of institutional harmony rather than public

accountability. This dynamic compromises the core values of "integrity" and "social responsibility" and reveals a structural flaw that is central to understanding PICE's behavior.

3. Case Studies of Catastrophe: A Study in Selective Inaction

PICE's response, or lack thereof, to the Ungka and Cabagan-Sta. Maria disasters stands in stark contrast to its actions in another, less high-profile incident. This discrepancy points to a selective application of professional duty that appears to be influenced by the rank of the individuals involved.

3.1 The Cabagan-Sta. Maria Bridge Collapse

Following the collapse of the Cabagan-Sta. Maria Bridge, Senate President Pro Tempore Jinggoy Estrada publicly called for accountability from specific high-ranking DPWH officials, including Undersecretaries Eugenio Pipo Jr. and Ador Canlas.⁵ In response, DPWH Secretary Manuel Bonoan publicly defended the officials, stating they would remain in their posts unless formal charges were filed against them.⁵ Throughout this period, which included a Senate inquiry and President Marcos Jr.'s own on-site inspection, there is no public record of a PICE-initiated technical investigation, press release, or a technical paper addressing the fundamental design flaws or the ethical conduct of the implicated officials.⁵

3.2 The Ungka Flyover Debacle

Similarly, the Ungka Flyover debacle, with its documented design failures and a subsequent congressional inquiry, also saw the naming of DPWH Western Visayas officials in criminal and administrative complaints.¹ As with the Isabela bridge collapse, no evidence suggests PICE launched a national-level investigation or issued a public statement addressing the matter, the flawed geotechnical analysis, or the subsequent waste of public funds.¹ The organization's silence was conspicuous, especially given the public outcry and the legal action taken by local officials.

3.3 The Selective Application of Professional Duty

A critical finding reveals that PICE's silence is not absolute. In a separate incident concerning the Marilog Bridge collapse in Davao, the organization did participate in a "collaborative inspection" alongside the City Engineer's Office and the Structural Engineers Association of Davao.¹⁹ This is a crucial distinction. The Marilog incident

involved a local city office and a contractor, with no senior DPWH national officials publicly implicated. The Ungka and Cabagan-Sta. Maria disasters, by contrast, saw direct accusations against DPWH undersecretaries. This pattern suggests that PICE's willingness to engage in professional oversight is not triggered by the severity of a disaster or its ethical duty to the public. Instead, it appears to be contingent on the rank and influence of the members involved. When the institutional reputation and careers of senior DPWH officials, who are also former PICE leaders, are at stake, the organization chooses institutional silence. This behavior reveals a biased and self-protective institutional reflex, rather than the principled conduct of an independent professional body.

4. The Nexus of Power: Interlocking Leadership and the Root of Inaction

The fundamental reason for PICE's inaction can be found in the direct and irrefutable evidence of interlocking leadership between the organization and the DPWH. The individuals who should be subject to PICE's investigation are the same individuals who have held the highest leadership positions within PICE itself.

4.1 Documenting the DPWH-PICE Link

The most damning evidence is the dual-identity of the implicated officials. Undersecretary for Regional Operations in Luzon, Eugenio R. Pipo Jr., was named by Senator Estrada in connection with the Cabagan-Sta. Maria bridge collapse.⁵ Pipo is also explicitly identified as a "former PICE national president"²¹ and a "PICE Past National President".²² Similarly, Undersecretary for Regional Operations in Visayas and Mindanao, Ador G. Canlas, was also named by Senator Estrada.⁵ Canlas is listed as a PICE Past National President²⁴ and was PICE's President-Elect in 2021.²³ This cross-pollination of leadership creates a structural conflict of interest, making it practically and ethically impossible for PICE to conduct a fair and impartial investigation into the actions of its own past presidents.

4.2 Table 1: PICE-DPWH Leadership Cross-Affiliations

The following table presents a clear, direct illustration of the conflict of interest that is at the heart of PICE's institutional paralysis.

Name of Official	Implicated Disaster(s)	DPWH Position	PICE Position(s)
Eugenio R. Pipo Jr.	Cabagan-Sta. Maria Bridge Collapse	Undersecretary for Regional Operations in Luzon ⁵	Past National President ²¹
Ador G. Canlas	Cabagan-Sta. Maria Bridge Collapse	Undersecretary for Regional Operations in Visayas and Mindanao ⁵	Past National President ²³

4.3 A Historical Pattern

This intertwining of leadership is not a recent development but a historical pattern that has defined PICE since its inception. The organization's first president, Marcial Kasilag, held a "high-ranking position in the government," and many of its early members were government engineers.¹⁰ A closer look at PICE's history reveals that other past presidents, such as Jesus S. Hipolito, Juanito "Janet" Nery Ferrer, and David M. Consunji, all served as Secretaries or Undersecretaries of the DPWH or its predecessor agencies.²⁶ This historical context demonstrates that the organization was founded on a symbiotic relationship with the government's infrastructure department, a relationship that has become a systemic problem, compromising PICE's ability to act as an independent voice for the profession.

4.4 The "Dominant Firm" Model as a Metaphor for the DPWH-PICE Relationship

To fully understand the dynamic at play, a concept from market economics—the "dominant firm" model—offers a powerful metaphor. In this model, a large, powerful entity, by virtue of its market share, dictates the conditions for smaller, dependent rivals.²⁷ The DPWH, with its multi-trillion-peso budget and sole authority over national infrastructure projects, acts as this dominant firm within the civil engineering ecosystem.⁹ PICE, whose leaders and members depend on the DPWH for professional opportunities, career advancement, and institutional prestige, functions as a dependent entity. This power dynamic means that a genuine, independent investigation by PICE into the DPWH would be a form of institutional self-sabotage. PICE's inertia is a rational, albeit unethical, response to this power dynamic; its institutional survival and the

professional welfare of its members are inextricably linked to the "dominant firm." This relationship is a compelling explanation for PICE's silence and underpins the conclusion that it operates as a pseudo-governmental extension of the DPWH.

5. The Ethical and Professional Fallout: A Failure to Uphold the Mission

PICE's inaction in the face of these major disasters represents a profound failure to live up to its own stated mission and ethical principles, with far-reaching consequences for the profession and the public.

5.1 Breach of the Professional Code

By remaining silent, PICE has committed a direct breach of its own professional code. The first and most critical failure is the organization's inability to "hold paramount the safety, health and welfare of the public".¹² The collapsed structures endangered lives and wasted public funds, yet the organization failed to provide a timely, independent voice for public safety. Second, the presence of DPWH Undersecretaries Eugenio Pipo Jr. and Ador Canlas in PICE's past leadership²⁰ created a conflict of interest that made an impartial investigation into their work impossible. Finally, the organization's silence diminishes the prestige of the civil engineering profession, fostering a public perception that the industry is either unable or unwilling to self-regulate with integrity.¹²

5.2 Contemporary Standards of Professional Accountability

PICE's behavior runs contrary to modern standards of professional accountability. Traditional accountability was centered on peers and personal conscience; however, contemporary standards are increasingly external, mandated by external regulators and focused on providing "robust recourse options for... those injured by unsafe structures".²⁸ PICE's institutional silence does not align with this modern framework. It also fails to model the "internally driven mindset" of professional responsibility that requires an organization and its members to take "ownership of their actions" and apply their expertise to improve outcomes.²⁹ By choosing to protect its compromised institutional relationship over its duty to the public, PICE fails to inspire a culture of professional responsibility among its members.

5.3 The "Unity of Effort" vs. The "Siloed" Approach

The response to the 2024 Francis Scott Key Bridge collapse in the United States provides a compelling counter-example to PICE's inaction.³⁰ The U.S. response was defined by a

"unity of effort" among multiple, independent agencies, including the National Transportation Safety Board (NTSB) and the U.S. Coast Guard. This transparent, multi-faceted investigation ensured that evidence was preserved, and findings could inform future regulations and bridge designs.³⁰ The DPWH-PICE nexus, by contrast, creates a compromised, self-protective system. In this siloed approach, the government agency and its professional oversight body are effectively one and the same. PICE's silence is not a passive act of omission but an active choice to maintain this compromised "unity of effort," to the detriment of its public and ethical obligations, thereby sacrificing transparency and accountability for the sake of institutional self-preservation.

6. Conclusion: A Pseudo-Governmental Nexus

The exhaustive analysis of PICE's mission, its Code of Ethics, and its selective inaction in the face of major infrastructure failures leads to a single, inescapable conclusion. The documented history of interlocking leadership between PICE and the DPWH, coupled with the glaring absence of independent investigations in cases where senior DPWH officials are implicated, unequivocally demonstrates that PICE's institutional independence has been compromised. The organization does not function as a self-regulating professional institute with a paramount duty to the public. Instead, its actions are managed in a manner that protects the interests of its high-ranking members within the government. By failing to hold its own members accountable for catastrophic project failures and conflicts of interest, PICE has abdicated its role as a key player in nation-building and has become, in all but name, a pseudo-governmental organization that is effectively managed by the DPWH.

7. Recommendations and Outlook

To restore public trust and the integrity of the civil engineering profession in the Philippines, a fundamental overhaul of PICE's structure and governance is necessary.

- **Immediate Action:** PICE must immediately launch an independent, third-party technical and ethical investigation into the Cabagan-Sta. Maria and Ungka Flyover collapses. The findings of these investigations must be made public.
- **Structural and Constitutional Reform:** PICE should revise its constitution and by-laws to prohibit active government officials, particularly those from the DPWH, from holding national leadership positions. This would create the necessary separation of powers to prevent future conflicts of interest.

- **Establishing Independent Accountability Mechanisms:** A permanent, independent ethics and accountability committee should be established. This committee must have the power to initiate investigations, subpoena records, and sanction members without interference from the national board or political pressure.
- **Enhanced Transparency:** PICE must mandate the public release of all technical findings and ethical reviews related to major infrastructure failures involving its members. This will foster transparency and accountability, which are essential for rebuilding public trust.
- **A Call to Action:** These reforms are not merely about a single organization; they are essential to ensuring the safety and integrity of the nation's future infrastructure. The civil engineering profession must either act as a true, independent guardian of public safety or risk being irrevocably compromised by the very government it is meant to oversee.

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Thoughts ▾